IN THE CLAIMS:

Please cancel without prejudice the following Claims 1-8 and 15-20.

Please add the following newly drafted Claims 21-30:

21. (New) A system for providing a controlled amount of a gas from a liquid source, comprising:

a source of liquid;

a source of a carrier gas;

a control valve for mixing the liquid with the carrier gas and gasifying the liquid including:

a valve body having a valve seat;

a valve member for controlling the opening of the valve seat;

a liquid inlet port for connection to the source of liquid;

a liquid reservoir positioned operatively on one side of the valve seat and connected to the liquid inlet port;

a carrier gas inlet port for connection to a source of carrier gas;

a mixing chamber positioned operatively on the other side of the valve seat and connected to the carrier gas inlet port; and

a release nozzle member with a restricted orifice connected to the mixing chamber wherein the valve member controls the delivery of liquid to the mixing chamber and the nozzle member releases the mixture of carrier gas and liquid reactant from the mixing chamber through the restricted orifice so that the liquid reactant is gasified when the pressure in the mixing chamber is sufficiently larger than the downstream pressure;

a first conduit from the source of liquid to the control valve;

a regulator unit attached to the first conduit to control the flow of liquid;

a second conduit from the source of carrier gas to the control valve; and

a control unit connected to the regulator unit and the control valve for controlling the production of gas, the control valve regulating the quantity of liquid and mixing the carrier gas with the liquid at a first pressure level greater than a second pressure level downstream of the release nozzle whereby the liquid mixed with the carrier gas is gasified with the assistance of the pressure differential.

22. (New) The invention of Claim 21 further including a heater unit connected to the control valve to heat the liquid.

23. (New) The invention of Claim 22 further including a second regulator unit for controlling the flow of carrier gas and the control unit controls the second regulator unit.

24. (New) The invention of Claim 21 further including a central mixing chamber in the control valve and a valve member that seats on a valve seat around the central mixing chamber whereby the liquid is introduced radially inward to the mixing chamber by the control valve.

25. (New) The invention of Claim 24 whereby the control valve includes a reservoir for receiving the liquid that is radially outward from the valve seat.

26. (New) The invention of Claim 25 wherein a heater unit is connected to the control valve to heat the liquid.

27. (New) The invention of Claim 21 wherein the valve body includes a diaphragm with a rigid outer perimeter.

28. (New) The invention of Claim 21 wherein the liquid reservoir is radially outward from the valve seat and the mixing chamber is radially inward from the valve seat whereby the valve member controls the inward flow of liquid to the mixing chamber.

29. (New) The invention of Claim 21 wherein the mixing chamber is an elongated groove.

30. (New) The invention of Claim 21 further including a discharge conduit from the release nozzle member that is heated.